

## **ABSTRACT:**

### Data Storage and Processing Systems

This invention generally relates to systems, methods and computer program code storing and processing data, in particular large volumes of data captured by monitoring digital mobile communications networks such as digital mobile phone networks.

A method of storing data captured from a digital communications network, for processing, said captured data comprising a stream of messages having message parameters, said stream of messages comprising messages of a plurality of communications sessions, the method comprising: inputting data from said stream of messages; writing, for sequential ones of said said stream of messages, sequential sets of parameters into a first FIFO (first-in first out) data structure, at an entry point of said first FIFO data structure; reading said sequential sets of parameters from an exit point of said first FIFO data structure; and writing sequential sets of parameters read from said first FIFO data structure into a second data structure; and wherein said entry point and said exit point are separated by a first data structure length; and wherein said first data structure length has a predetermined minimum value defined in terms of a number of said sets of parameters and/or a time between said writing of a said set of parameters into said first data structure and said reading of a said set of parameters from said first data structure.

Figure 7a